What is claimed is:

1. A passive electrical device, comprising:

a first electrical conductor;

a second electrical conductor disposed over said first electrical conductor;

a third electrical conductor connecting said first electrical conductor to said second electrical conductor, wherein said first, second and third conductors are disposed on a semiconductor substrate and wherein the sheet resistivity of said first electrical conductor is approximately equal to the sheet resistivity of said second electrical conductor.

2. The device as claimed in claim 1, wherein each of said first, second and third conductors has a respective thickness, and the thickness of said first conductor is approximately equal to the thickness of said second conductor.

3. The device as claimed in claim 1, wherein each of said first, second and third conductors has a respective thickness, the thickness of said first conductor being approximately equal to the thickness of the second conductor and being approximately one-half the thickness of said third conductor.

4. The device as claimed in claim 1, wherein said first, second and third electrical conductors consist essentially of copper.

Sub A' cont.

5. The device as claimed in claim 1, wherein said first and third electrical conductors consist essentially of copper, and said second electrical conductor consists essentially of aluminum.

6. The device as claimed in claim 1, wherein each of said first and said second electrical conductors has a respective thickness in a range of approximately two to approximately 32 microns.

7. The device as claimed in claim 6, wherein said third electrical conductor has a thickness in a range of approximately two to approximately 10 microns.

8. The device as claimed in claim 5, wherein said second electrical conductor has a substantially uniform thickness in a range of approximately four microns to approximately six microns.

9. An inductor, comprising:

a semiconductor substrate;

first, second and third electrical conductors provided on said substrate, wherein said first and second electrical

conductors each has a thickness which is approximately equal, and wherein said semiconductor substrate comprises silicon.

Sub A1 cont.

10. The inductor as claimed in claim 9, wherein said substrate comprises silicon and germanium.

11. The inductor as claimed in claim 9, wherein said substrate is a silicon on insulator substrate.

12. The inductor as claimed in claim 9, wherein said substrate is a silicon-on-sapphire substrate.

13. The inductor as claimed in claim 9, wherein said second electrical conductor is disposed over said first electrical conductor.

14. The inductor as claimed in claim 9, wherein said first and said second electrical conductors are spiral shaped.

15. The inductor as claimed in claim 9, wherein each of said first and said second electrical conductors has a sheet resistivity, the sheet resistivity of said first electrical conductor being approximately equal to the sheet resistivity of said second

electrical conductor.